XXX. NWA1950 (Jules Verne)

Lherzolitic Peridotite

~ 797 grams (2 stones)

Figure XXX-1. Photo of NWA1950 (courtsey of Bruno Fectay and Carine Bidaut). Scale is in cm. (fingers unknown).

Introduction

Russell et al. (2004) report that two stones (414 and 383 grams) were found in the Atlas Mts. Morocco in 2001. They both have fusion crust (figures XXX-1 and XXX-3).

Petrography

The texture of NWA1950 is similar to that of ALH77005 (figure XXX-2).

Mineralogy

Pyroxene: Pigeonite is $En_{78}Fs_{19}Wo_{2}$-$En_{60}Fs_{26}Wo_{14}$. Augite is $En_{53}Fs_{16}Wo_{31}$-$En_{45}Fs_{14}Wo_{41}$.

Plagioclase: Plagioclase is shocked to maskelynite An_{57-40}.

Chemistry

The rare earths have been determined (figure XXX-4) and are found between ALH77005 and NWA480.

Radiogenic age dating

None

Cosmogenic isotopes and exposure ages

None

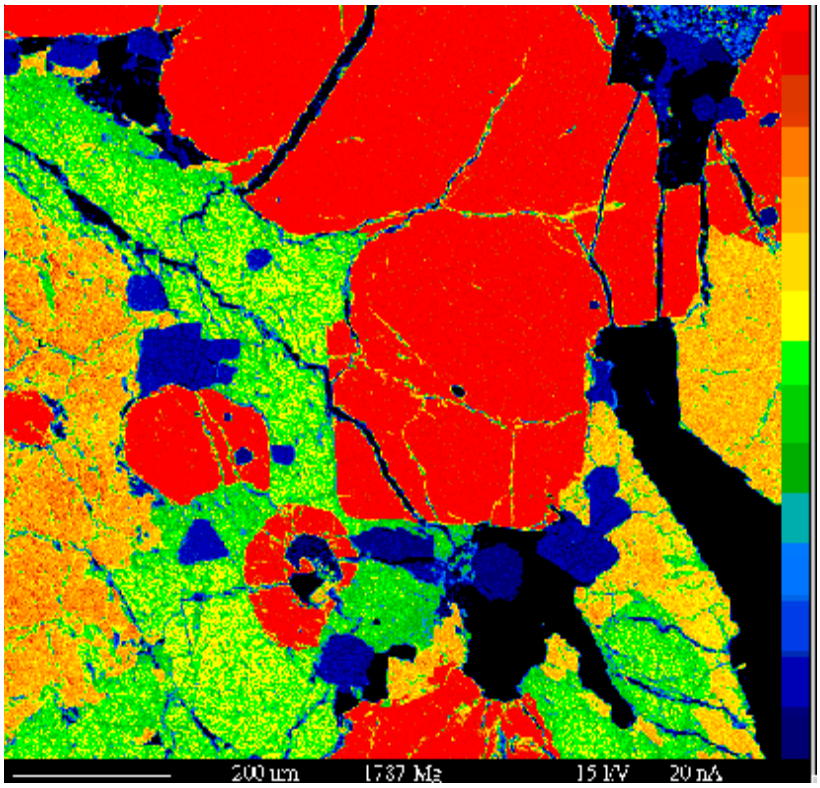

Figure XXX-2: *Texture of polished section of NWA1950 (courtesy J-A.Barrat and Marcel Bohn). Minerals generally lack chemical zonation. This striking photo is a map of Mg content of olivine (red), chromite and or ilmenite (blue), maskelynite (black), pigeonite (orange) and augite (green).*

Mineralogical Mode

	Russell et al. 2004
Olivine	55 vol. %
Pyroxene	35
Plagioclase	8

Figure XXX-3: *Jules Verne #2 (photo courtsey Bruno Fectay and Carine Bidaut). Scale is in cm.*

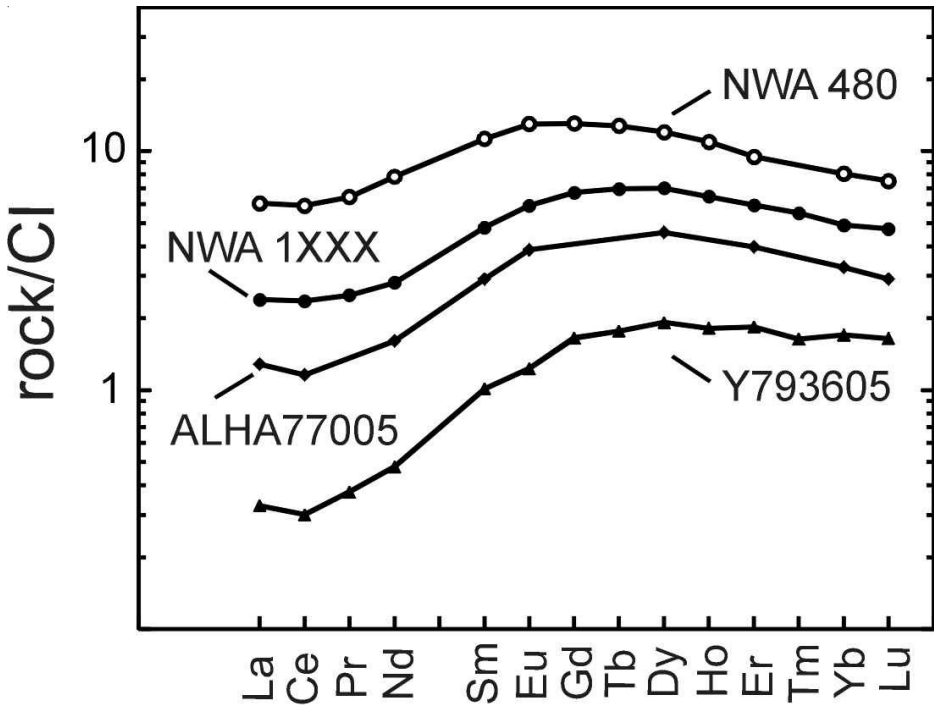

Figure XXX-4: *Rare-earth-element pattern for Jules Verne (NWA1950) (from Barret).*